CLAIMS

1. A ring compression device for applying force onto a ring to fix the ring on a mounting body, the device comprising:

a plurality of pressing members radially provided with tips thereof pointed to a central axis of a substrate and allowing the tips to freely move back and forth in relation to the central axis on a prespecified plane;

a rotating body rotatably provided on the substrate on the central axis extending along the plane; and

a driven unit that makes the tip of each of the pressing members move toward the central axis along with rotation of the rotating body and applying force to the ring from the outside thereof with the tips of the pressing members, wherein the rotating body is integrally engaged with each of the pressing members.

2. The ring compression device according to claim 1, wherein, in an initial state, a tip of a specific pressing member is aligned to a reference circle of the central axis constituting an external periphery of the ring, and tips of the other pressing members are provided in a position deviating to the outer side of the reference circle; and

the driven unit aligns, when making each of the pressing members move forward, the tips of all pressing members to the reference circle, thereby making the tips of all pressing members move together.

3. The ring compression device according to claim 1, further comprising:

a hooking unit for hooking the ring, the hooking unit having a claw member abutting on an edge face on one side of the ring on the side of the substrate and also having a

movable claw member abutting on an edge face on the other side of the ring on the tip side of the specific pressing member, wherein, in the initial state, a tip of a specific pressing member is aligned to a reference circle for the central axis constituting an external periphery of the ring, and tips of the other pressing members are provided in a position deviating to the outer side of the reference circle; and the driven unit aligns, when making the each of the pressing members move forward, the tips of all pressing members to the reference circle, thereby making the tips of all pressing members move together.

4. The ring compression device according to claim 1, further comprising:

a holding unit for aligning and holding the mounting body in relation to the central axis.

5. The ring compression device according to claim 1, further comprising:

a holding unit for aligning and holding the mounting body in relation to the central axis, wherein, in an initial state, a tip of a specific pressing member is aligned to a reference circle for the central axis constituting an external periphery of the ring, and tips of the other pressing members are provided in a position deviating to the outside of the reference circle; and the driven unit aligns, when making the each of the pressing members move forward, the tips of all pressing members to the reference circle, thereby making the tips of all pressing members move together.

6. The ring compression device according to claim 1, further comprising:

a hooking unit for hooking the ring, the hooking unit having a claw member abutting on an edge face on one side of the ring on the side of the substrate while having a movable claw member abutting on an edge face on the other side of the ring on the tip side of the specific pressing member; and

a holding unit for aligning and holding the mounting body in relation to the central axis, wherein, in the initial state, a tip of a specific pressing member is aligned to a reference circle for the central axis constituting an external periphery of the ring, and tips of the other pressing members are provided in a position deviating to the outside of the reference circle; and the driven unit aligns, when making the each of the pressing members move forward, the tips of all pressing members to the reference circle, thereby making the tips of all pressing members move together.

7. A ring compression method of applying force from the outside of a ring to fix the ring in the circumference of a mounting body to be fixed, comprising the steps of:

hooking the ring in an inner position of each tip of the plurality of pressing members provided to freely move forward to a prespecified central axis;

inserting the mounting body into the ring to align and hold the mounting body to the central axis; and

applying force at the tip moved forward from the outside of the ring.

8. The ring compression method according to claim 7, further comprising the steps of:

aligning, before hooking the ring, a tip of a specific pressing member to a reference circle for the central axis

constituting an external periphery of the ring, and providing the tips of the other pressing members in a position deviating to the outside of the reference circle; and

aligning, when each of the tips are moved forward, the tips of all pressing members to the reference circle.